

Folarin Kolawole, Ph.D.

61 Rt. 9W, Palisades, New York

Email: folak@ldeo.columbia.edu | Website: www.folarinkolawole.com

Current Position:

Assistant Professor of Structural Geology, Columbia University, New York, U.S.

Areas of Expertise:

Structural Geology, Tectonics, Geophysics, Rock Mechanics

Professional Appointments:

Assistant Professor of Structural Geology , Columbia University	07/2022 - Present
Adjunct Associate Research Scientist , Lamont-Doherty Earth Observatory	2021 - 2022
Upstream Structural Geologist , BP America	2020 - 2022
Structural Geology Intern , BP America	2019 - 2019
Structural Geology Intern , Chesapeake Energy	2018 - 2018
Graduate Research & Teaching Assistant , University of Oklahoma	2017 - 2020
Graduate Teaching Assistant , Oklahoma State University	2015 - 2017
On-site QC seismologist , BGP-CNPC, Nigeria	2010 - 2014

Education:

Ph.D. in Geophysics August 2020
University of Oklahoma
Emphasis: Structural Geology, Geomechanics, Geophysics
Advisers: Brett M. Carpenter and Ze'ev Reches

M.S. in Geology August 2017
Oklahoma State University
Emphasis: Active Tectonics, Near-Surface Geophysics
Advisers: Estella A. Atekwana and Mohamed Abdel Salam

B.S. in Geology October 2008
Federal University of Technology, Akure (F.U.T.A.), Nigeria
Emphasis: Structural Geology, Remote Sensing
Adviser: Yekini B. Anifowose

Teaching Experience

Instructor: <i>Death Valley Field Excursion</i> (Columbia University)	2024 - Present
Instructor: <i>Crustal Deformation</i> (Columbia University)	2022 - present
Instructor: <i>Tutorial in Earth Science</i> (Columbia University)	Spring 2025
Instructor: <i>Tutorial in Earth Science</i> (Columbia University)	Fall 2024
Instructor: <i>Tutorial in Earth Science</i> (Columbia University)	Summer 2023
Instructor: <i>Tutorial in Earth Science</i> (Columbia University)	Spring 2023
Co-Instructor: <i>Death Valley Field Excursion</i> (Columbia University)	Spring 2023
Instructor: <i>Tutorial in Earth Science</i> (Columbia University)	Fall 2022
Teaching Assistant: <i>Structural Geology</i> (Univ. of Oklahoma)	2019
Field Teaching Assistant: <i>3-Day Field Trip on the Geology of Oklahoma for New Graduate Students</i> (Univ. of Oklahoma)	2019

Teaching Assistant: <i>Structural Geology & Stratigraphy for Engineers</i> , (Univ. of Oklahoma)	2019
Teaching Assistant: <i>Structural Geology</i> (Univ. of Oklahoma)	2018
Teaching Assistant: <i>Geology & Human Affairs</i> (Oklahoma State Univ.)	2017
Teaching Assistant: <i>Introduction to Geophysics</i> (Oklahoma State Univ.)	2016
Teaching Assistant: <i>Geology & Human Affairs</i> (Oklahoma State Univ.)	2015

Awards

Grant Awards as PI/Co-PI (Total since 2022, external: \$1,086,613, internal: \$41,231)

- 2025 – National Science Foundation (NSF-2501725) (**\$213,213**). PI. Tectonic Reactivation of Oceanic Fracture Zones, Davie Ridge (Co-PI: Waldhauser)
- 2025 – National Science Foundation (NSF-2447284) (**\$703,638**) Co-PI. Understanding the geodynamic evolution of the Antarctic mantle and crust since ice sheet inception (PI: Jacky Auermann)
- 2025 - Southern California Earthquake Center (SCEC #25198) (**\$15,000**), PI. *Investigating Along-Fault Variation of Shallow Inelastic Damage of the San Andreas Fault*.
- 2024 – National Science Foundation RAPID Grant (NSF-2431983) (**\$24,641**) Co-PI. *Post-Seismic Survey of the April 5, 2024 Mw4.8 New Jersey Earthquake* (PI: Waldhauser).
- 2024 – Cascadia Region Earthquake Science Center (2017Y0SC) (**\$30,991**) PI. *Multi-resolution and -scale synthesis of Cascadia Earth Models* (Co-PI: Ajala).
- 2024 - Southern California Earthquake Center (SCEC #24021) (**\$38,111**), PI. *Slip Rates and the Deformation Field of the Northern Black Mountain Fault*.
- 2024 - Southern California Earthquake Center (SCEC #24043) (**\$31,464**), PI. *3D full waveform inversion of the Salton Seismic Imaging Project active source dataset* (Co-PI: Ajala).
- 2023 - Southern California Earthquake Center (SCEC #23178) (**\$29,555**), PI. *Active-Source Adjoint Tomographic Update of CVM-H 15.1 in Salton Trough* (Co-PI: Ajala).
- 2023 - Provost's Junior Faculty Grant, Columbia University (**\$29,715**), PI.
- 2023 - Lenfest Junior Faculty Grant, Columbia University (**\$11,516**), PI.
- 2018 - Geological Society of America (GSA) Student Research Grant (**\$2,000**), PI.

Grant Awards to students & postdocs (Total: \$141,700):

- 2025 – AAPG Foundation Grants-in-Aid Award to student Meritxell Colet (\$2,500)
- 2025 – GSA Student Grant Award to student Meritxell Colet (\$1,000)
- 2025 – Lewis & Clark Fund (American Phil. Soc.) Award to student Meritxell Colet (\$5,000)
- 2024 – AAPG Foundation Grants-in-Aid Award to student Sydney Maguire (\$3,000)
- 2024 – NSF Postdoctoral Fellowship Award to postdoc Rasheed Ajala (\$130,000)

Society Awards:

2025 Jason Morgan Early Career Award, American Geophysical Union

Professional Feature:

- **Science Magazine (AAAS) (Nov. 7, 2024): Africa's Breaking Heart:** A Science article feature that was dedicated to my research on continental rift initiation, detailing my journey as a geoscientist and my vision as an emerging leader in the field.
- **GeologyBites feature (June 3, 2025): Folarin Kolawole on Continental Rifting:** A podcast interview by Oliver Strimpel. GeologyBites is arguably the best and most subscribed geoscience podcast in the world.

Fellowships & Other Awards:

- Chris J. Cheatwood Geology & Geophysics Graduate Scholarship Award, University of Oklahoma (August 2018)
- Decker Dawson Graduate Fellowship in Geophysics, Oklahoma State University (August 2016)
- Skinner Geology Graduate Fellowship, Oklahoma State University (August 2015)
- 2nd Place Best Poster Presentation at the ConocoPhillips Research Symposium, University of Oklahoma (April 2019)
- 1st Place Best Poster Presentation at the 2019 AAPG Spring-Break Student Expo (March 2019)
- 2018 Ben Hare Excellence in Research Award, School of Geosciences, University of Oklahoma (May 2018)
- 3rd Place Best Poster Presentation, the 2018 AAPG Spring-Break Student Expo (March 2018)
- 1st Place Best Student Oral Presentation at Eastern Section Seismological Society of America Annual Meeting (October 2017)
- Best Poster Presentation, AAPG-ConocoPhillips TechFest 2017 Conference, Oklahoma State University (March 2017)

Media Coverage/Mentions:

GeologyBites podcast feature interview by Oliver Strimpel (June 3, 2025): 'Folarin Kolawole on Continental Rifting'

NewsDay article by Lorena Mongelli (April 4, 2025): Year after 4.8 magnitude earthquake rattled Long Island, a recent microquake recorded near epicenter

Science Magazine (AAAS) Logbook Feature (Nov. 7, 2024): *Hunting for rifts. And grants. And family time*

News12 TV Interview with Edric Robinson (12 Oct 2024): New study sheds light on April earthquake felt in NYC

Bergen Record newspaper profile (April 19, 2024): Geologists from Columbia University gather data after NJ earthquake

Bergen Record newspaper profile (April 19, 2024): How NJ earthquake shook local geologists into fervent action

NBC4 New York TV interview with Gus Rosendale (April 6, 2024): Magnitude 4.8 earthquake shakes tri-state

The New York Times newspaper mention (April 5, 2024): Friday's earthquake brings attention to the region's fault lines

LiveNOW from FOX TV interview with Josh Breslow (April 6, 2024): NJ earthquake: More aftershocks possible

News Nation TV interview with Hena Doba (April 5, 2024): How Rare are Earthquakes in the Northeast?

The Daily Beast newspaper mention (April 5, 2024): Does the East Coast Earthquake Mean the Big One Is Coming?

Parsing Science Podcast interview (December 12, 2017): Fault Reactivation and Earthquakes.

Sequent News & Update feature (November 15, 2018): Finding Faults: Improving Human Safety in Earthquake-Prone Areas.

Sequent News & Update feature (June 19, 2018): Aeromagnetic data helps to assess earthquake potential.

OSU College of Arts & Sciences News feature (June 8, 2017): OSU researcher authors paper exploring Pawnee quake damage.

Postdocs and Students

Columbia University:

Postdoc(s):

- Rasheed Ajala: NSF Postdoc Fellow (Fall 2024 - present), Lamont Postdoc Fellow (2022 - 2024)

PhD Students:

- Andry Ramarolahy (Fall 2024 - present)
- Meritxell Colet (Fall 2023 - present)

Undergraduate Students:

- Maya Madajewicz (Fall 2025 - present)
- Salvatore Ferrera (Summer 2025 - present)
- Alexis Mitchel (Fall 2024 – present)
- Lela Kornfeld (Spring 2023 – present)

Alumni:

- Leonard Ohenhen: Lamont Postdoc Fellow (Fall 2024 – Summer 2025); Now Assistant professor at UC Irvine, California.
- Cameron Grant (Undergrad., Fall 2022 – Spring 2024): Completed BSc. Thesis; now MS student at Colorado School of Mines.
- Mia Caitlyn Yiannias (Fall 2024 – Summer 2025)
- Christian Rowan (Grad., Fall 2022 – Spring 2025)
- Zachary Foster-Baril (Spring 2024 – Spring 2025)
- Sydney Maguire (Grad., Fall 2023 – Spring 2024)
- Eva Sherman (Undergrad., Fall 2023 research intern)
- Macy Matthews (Undergrad., 2023 summer intern)
- Farhan Tanvir (Undergrad., 2023 summer intern)
- Sarah Hisham Alsharif (Undergrad., 2023 summer intern)
- Lawson Goodloe (Undergrad., Fall 2022 research intern)

Non-Columbia Univ. Students (last engagement/degree of pursuit at the time/institution):

- Jean-Joel Legre (current – PhD/Rochester University, NY)
- Boniface Kgosidintsi (current – PhD student at Oklahoma State Univ.) (2020- 2025, MS/BIUST, Botswana)
- Debbie Mfa (2022 – 2024; MS/BIUST, Botswana); now PhD student at Univ. of Adelaide
- Krista Watson (Summer 2023, REU - Undergrad/Gateway Community College, CT)
- Patrick Boston (Summer 2023, Undergrad/Midwestern State University, TX)
- Leonard Ohenhen (2022 – MS/University of Delaware, DE)
- Oyewande Ojo (2022 – PhD/Oklahoma State University, OK)
- Hardy Nkodia (2022- PhD/Marien Ngouabi University, DR. Congo); Now Lecturer at Marien Ngouabi University, DR. Congo
- Roberto Clairmont (2020 – MS/University of Oklahoma, OK)
- Brandon Chase (2020 – MS/Oklahoma State University, OK)
- Max Firkins (2020 – MS/University of Oklahoma, OK)
- Oladoyin Kolawole (2020 – PhD/Texas Tech., TX)
- Thuwaiba Al Wahaibi (2019 – Undergrad/University of Oklahoma, OK)
- Erin Heilman (2018 – Undergrad/Oklahoma State University, OK)

Journal Publications

(Peer-Reviewed): [‡]Undergraduate student, [†]PhD student, ^{*}Postdoc in my lab group; ^{*}equal contribution (or corresponding author)

53. Tielke, J., Verdecchia, A., Pederson, C., Prakash, A., McCarthy, C., **Kolawole, F.**, Harrington, R.M. (2025). Hybrid frictional behavior of hydrothermally-altered fault zones in long-lived polyphase geothermal reservoirs. *Geophysical Research Letters*, 52 (23), e2025GL117709.
52. Cochran, E.S., Zakharova, N., Carpenter, B.M., **Kolawole, F.**, Hayman, N.W., Sone, H., Schmitt, D.R., Eichhubl, P., Ellsworth, W., Guglielmi, Y., Hickman, S., Tobin, H.J. (2025). Potential for Continental Scientific Drilling to Inform Fault Mechanics and Earthquake Science. *Seismica* 4(2).
51. Kwagalakwe, A., Stamps, D.S., **Kolawole, F.**, Atekwana, E.A., Taylor, M., Atekwana, E.A., Katumwehe, A.B., Barry, P.H., Njinju, E.A., Nyago, J., Tugume, F., Kiberu, J.M., Nakajigo, J., Kabanda, A. (2025). Constraining the Kinematics of the Victoria Microplate and the Northern Western Branch of the East African Rift System. *Geophysical Research Letters*, 52, e2025GL116301.
50. Njinju, E.A., **Kolawole, F.**^{*}, Atekwana, E.A., Atekwana, E.A., Stamps, D.S., van der Lee, S., Evans, R.L., Taylor, M.H., Katumwehe, A.B., Ajala, R.^{*} (2025). Low-Density Perturbations in the Crust Indicate Potential for Blind Magmatism beneath Magma-Poor Rifts. *Tectonophysics*. doi.org/10.1016/j.tecto.2025.230881.
49. Katumwehe, A., Atekwana, E., Mickus, K., Ngalamo, J.F.G., **Kolawole, F.** (2025). How do Propagating Rifts Breach Cratons? Insights from the Northwestern Branch of the East African Rift, Uganda. *Geophysical Journal International*, 242, 1–18. doi.org/10.1093/gji/ggaf214.
48. Colet, M.[‡], **Kolawole, F.**, Ajala, R.^{*}, Delvaux, D., Nkodia, H.M.D. (2025). Active Crustal Deformation across a Nucleating Extensional Microplate, D. R. Congo, East Africa. *Tectonics*, 44(7), e2025TC008815. doi.org/10.1029/2025TC008815.
47. Beaucé, E., Waldhauser, F., Schaff, D., Kim, W.Y., **Kolawole, F.** (2025). The 2024 Tewksbury, New Jersey seismic sequence revealed by local seismic networks and machine-learning-enhanced detection techniques. *Geophysical Research Letters*, v. 52 (12). DOI: 10.22541/au.173956793.37866560/v1.
46. **Kolawole, F.**, Xue, L., Dulanya, Z. (2024). Rapid Versus Delayed Linkage and Coalescence of Propagating Rift Tips. *AGU Books: Extensional Tectonics: Continental Breakup to Formation of Oceanic Basins*. Doi: 10.1002/9781119773757.ch9.
45. Njinju, E.A., **Kolawole, F.**, Stamps, S.D., Atekwana, E.A., Ghoms, F.E.K., Atekwana, E.A. (2024). Intrarift fault interactions: Insights from coseismic stress redistribution from large seismogenic segment ruptures, Northern Malawi Rift. *Journal of Structural Geology*, v.191, 105326.
44. Mfa, D., **Kolawole, F.**^{*}, Kgosidintsi, B., Ajala, R.^{*}, Shemang, E. (2024). Long-Lived Seismic Instability of a Large Intraplate Brittle Shear Zone Revealed by Distributed Slip Zones and Paleoseismic Frictional Melt, Eastern Botswana. *Journal of Structural Geology*, v.191, 105324.
43. Dulanya, Z., **Kolawole, F.**^{*}, Gallen, S.F., Williams, J.N. (2024). On the Timescales of Border Fault Growth: Pleistocene Slip Acceleration and Lateral Border Fault Propagation in the Lower Shire Graben, East Africa. *Tectonics*, 43(9), p.e2023TC008232.
42. Grant, C.[‡], **Kolawole, F.**, Williams, J. (2024). Evolution of Incipient Rift Faulting in Magma-Poor Divergent Plate Boundaries: New Insights from the Incipient Okavango-Makgadikgadi Rift Zone, Botswana. *Earth and Planetary Science Letters*, 646, 118957.

41. Xue, L., Moucha, R., **Kolawole, F.**, Muirhead, J. D., Scholz, C. A. (2024). The influence of the strength of pre-existing crustal-scale weak zones on rift geometry and strain localization. *Tectonophysics*, 890, 230472.
40. **Kolawole, F.**, Ajala, R.* (2024). Propagating rifts: the roles of crustal damage and ascending mantle fluids, *EGU-Solid Earth*, 15, 747–762. Doi: 10.5194/se-15-747-2024.
39. Legre, J.-J., Olugboji, T., Qin, Y., **Kolawole, F.** (2024). The Intraplate Stress Field of West Africa. *Geophysical Research Letters*, 51, e2023GL107614. Doi: 10.1029/2023GL107614.
38. Ajala, R.*, **Kolawole, F.**, Menke, B. (2024). Blind magmatism abets nonvolcanic continental rifting. *Nature Communications Earth & Environment*, 5(80). Doi: 10.1038/s43247-024-01244-7.
37. Li, P., Nakata, N., **Kolawole, F.**, Carpenter, B.M. (2023). Towards the Usage of Quarry Blasts as an Active Seismic Source for Subsurface Characterization and Imaging. *Geophysical Journal International*, 235(3), pp.2916-2926.
36. **Kolawole, F.**, Evenick, C. (2023). Global Distribution of Geothermal Gradients in Sedimentary Basins. *Geoscience Frontiers*, 14. Doi: 10.1016/j.gsf.2023.101685.
35. Shaban, S., **Kolawole, F.**, Scholz, C.A., (2023). The Deep Basin and Underlying Basement Structure of the Tanganyika Rift. *Tectonics*, 42, e2022TC007726. Doi: 10.1029/2022TC007726.
34. Ohenhen, L.O., Mayle, M., **Kolawole, F.**, Ismail, A., Atekwana, E.A. (2023). Exploring for Groundwater in Sub-Saharan Africa: Insights from Integrated Geophysical Characterization of Weathered Basement Aquifer System, Central Malawi. *Journal of Hydrology: Regional Studies*, 47 (101433).
33. Brune, S., **Kolawole, F.**, Olive, J.-A., Stamps, D.S., Buck, R.W., Buiter, S.J.H., Furman, T., Shillington, D.J. (2023). Geodynamics of continental rift initiation and evolution. *Nature Reviews Earth & Environment*, 4(4), pp.235-253. Doi: 10.1038/s43017-023-00391-3.
32. Chisenga, S., **Kolawole, F.**, Atekwana, E.A., Yan, J., Rajaonarison, T., Shemang, E.M. (2023). Localization of Large Intraplate Earthquakes along Faulted Density-Contrast Boundaries: Insights from the 2017 Mw6.5 Botswana Earthquake. *Journal of African Earth Sciences*, 197, 104752. Doi: 10.1016/j.jafrearsci.2022.104752.
31. Williams, J.N., Wedmore, L.N.J., Fagereng, A., Werner, M.J., Mdala, H., Shillington, D., Scholz, C.A., **Kolawole, F.**, Wright, L.J.M., Biggs, J., Dulanya, Z., Mphepo, F., Chindandali, P.R.N. (2022). Geologic and geodetic constraints on the seismic hazard of Malawi's active faults: The Malawi Seismogenic Source Database (MSSD). *Natural Hazards and Earth System Sciences*, 22, 3607–3639.
30. Nkodia, H.M.D., Miyouna, T., **Kolawole, F.**, Boudzoumou, F., Loemba, A.P.R., Bazebizanza, N.C.T., Delvaux D. (2022). Seismogenic Fault Reactivation in Western Central Africa: Insights from Regional Stress Analyses. *Geochemistry, Geophysics, Geosystems*, 23 (11), e2022GC010377.
29. **Kolawole, F.**, Vick, T., Atekwana, E.A., Laó-Dávila, D.A., Costa, A.G., and Carpenter, B.M. (2022). Strain Localization and Migration During the Pulsed Lateral Propagation of the Shire Rift Zone, East Africa. *Tectonophysics*, 839, 229499. doi: 10.1016/j.tecto.2022.229499.
28. Dulanya, Z., Gallen, S.F., **Kolawole, F.**, Williams, J.N., Wedmore, L.N.J., Biggs, J., Fagereng, Å (2022). Knickpoint Morphotectonics of the Middle Shire River Basin: Implications for the Evolution of Rift Interaction Zones. *Basin Research*. doi: 10.1111/bre.12687.
27. Chase, B.F., **Kolawole, F.**, Atekwana, E.A., Carpenter, B.M., Turko, M., Abdelsalam, M.G., and Finn, C. (2022). The 180 km-Long Meers-Willow Fault System in the Southern

Oklahoma Aulacogen: A Potential US Mid-Continent Seismic Hazard. *GSA Bulletin*, 135(3-4), pp.663-677.

26. Williams, J.N., Wedmore, L.N.J., Scholz, C.A., **Kolawole, F.**, Wright, L.J.M., Shillington, D., Fagereng, A., Biggs, J., Mdala, H., Dulanya, Z., Mphepo, F., Chindandali, P.R.N., Werner, M.J. (2022). The Malawi Active Fault Database: an onshore-offshore database for regional assessment of seismic hazard and tectonic evolution. *Geochemistry, Geophysics, Geosystems*, 23, e2022GC010425. doi: 10.1029/2022GC010425 (Open access).
25. Ojo, O.O., Ohenhen, L., **Kolawole, F.**, Johnson, S.G., Chindandali, P.R., Atekwana, E.A., Laó-Dávila, D.A. (2022). Under-Displaced Normal Faults: Strain Accommodation along an Early-Stage Rift-Bounding Fault in the Southern Malawi Rift. *Frontiers in Earth Science*. v. 10. doi: 10.3389/feart.2022.846389 (Open access).
24. Olugboji, T.M., Shirzaei, M., Lu, Y., Adepelumi, A.A., and **Kolawole, F.** (2021) On the Origin of Orphan Tremors & Intraplate Seismicity in Western Africa. *Frontiers in Earth Science*. doi: 10.3389/feart.2021.716630
23. **Kolawole F.**, Firkins, M.C., Al Wahaibi, T.S., Atekwana, E.A., Soreghan, M.J. (2021). Rift interaction zones and the stages of rift linkage in active segmented continental rift systems. *Basin Research*. doi: 10.1111/bre.12592.
22. **Kolawole F.**, Phillips, T.B., Atekwana, E.A., Jackson, C.A-L. (2021). Structural Inheritance Controls Strain Distribution During Early Continental Rifting, Rukwa Rift. *Frontiers in Earth Science*. doi:10.3389/feart.2021.707869.
21. Hamilton, M., Carpenter, B.M., Johnston, C.S., **Kolawole, F.**, Evans, S.C. and Elmore, R.D. (2021). Fractured, altered, and faulted basement in northeastern Oklahoma: Implications for induced seismicity. *Journal of Structural Geology*, p.104330. doi:10.1016/j.jsg.2021.104330.
20. Kolawole O., Ispas I., **Kolawole F.**, Gernay C., McLennan J.D. (2021). Mechanical zonation of rock properties and the development of fluid migration pathways: implications for enhanced geothermal systems in sedimentary-hosted geothermal reservoirs. *Geothermal Energy*, doi:10.1186/s40517-021-00195-y.
19. Patel, S., **Kolawole, F.**, Walter, J.I., Chen, X., and Marfurt, K.J. (2020). Seismic illumination of small-throw seismogenic faults, Anadarko Basin, Oklahoma. *Interpretation*, vol. 9, no. 2; p. SE35–SE51, doi:10.1190/INT-2020-0135.1.
18. Firkins, M., **Kolawole, F.**, Marfurt, K.J., and Carpenter, B.M. (2020). Attribute-assisted characterization of basement faulting and the associated sedimentary sequence deformation in north-central Oklahoma. *Interpretation*, 8(4), SP175-SP189, doi:10.1190/INT-2020-0053.1.
17. Clairmont, R., **Kolawole, F.**, Omale, A.P., and Bedle, H. (2020). Controls of pre-existing structures on clinoform architecture and the associated progradational system elements. *Basin Research*, 00, 1– 28, doi:10.1111/bre.12487.
16. **Kolawole, F.**, Carpenter, B.M., and Simpson-Turko, M. (2020) Basement-controlled deformation of sedimentary sequences, Anadarko Shelf, Oklahoma. *Basin Research*, 32, 1365– 1387, doi:10.1111/bre.12433.
15. Qin, Y., Chen, X., Walter, J.I., Haffener, J., Trugman, D.T., Carpenter, B.M., Weingarten, M., and **Kolawole, F.** (2019) Deciphering the stress state of seismogenic faults in Oklahoma and southern Kansas based on an improved stress map. *Journal of Geophysical Research: Solid Earth*, 124, 12920– 12934, doi:10.1029/2019JB018377.
14. Njinju, E. A., Atekwana, E. A., Stamps, D. S., Abdelsalam, M. G., Atekwana, E. A., Mickus, K. L., Fishwick, S., **Kolawole, F.**, Rajaonarison, T. A., and Nyalugwe, V. N. (2019).

Lithospheric structure of the Malawi Rift: Implications for magma-poor rifting processes. *Tectonics*, 38, doi: 10.1029/2019TC005549.

13. **Kolawole, F.**, Johnston, C.S., Morgan, C.B., Chang, J.C., Marfurt, K.J., Lockner, D.A., Reches, Z., and Carpenter, B.M. (2019) The susceptibility of Oklahoma's basement to seismic reactivation. *Nature Geoscience*, 12(10), 839-844, doi: 10.1038/s41561-019-0440-5.
12. Njinju, E. A., ***Kolawole, F.**, Atekwana, E.A., Stamps, D.S., Atekwana, E.A., Abdelsalam, M.G., Mickus, K.L. (2019). Terrestrial heat flow in the Malawi Rifted Zone, East Africa: Implications for tectono-thermal inheritance in continental rift basins. *Journal of Volcanology and Geothermal Research*, 387, 106656, doi:10.1016/j.jvolgeores.2019.07.023.
11. Heilman, E., ***Kolawole, F.**, Atekwana, E.A. and Mayle, M. (2019). Controls of basement fabric on the linkage of rift segments. *Tectonics*, 38(4), 1337-1366, doi:10.1029/2018TC005362.
10. Qin, Y., Chen, X., Carpenter, B.M., and **Kolawole, F.** (2018). Coulomb stress transfer influences fault reactivation in areas of wastewater injection. *Geophysical Research Letters*, doi:10.1029/2018GL079713.
9. **Kolawole, F.**, Atekwana, E.A., Laó-Dávila, D.A., Abdel Salam, M.G., Chindandali, P.R., Salima, J., and Kalindekafe, L. (2018). Active deformation of Malawi rift's north basin Hinge zone modulated by reactivation of pre-existing Precambrian Shear zone fabric. *Tectonics*, 37(3), 683-704, doi:10.1002/2017TC004628.
8. **Kolawole, F.**, Atekwana, E.A., Laó-Dávila, D.A., Abdel Salam, M.G., Chindandali, P.R., Salima, J., and Kalindekafe, L. (2018). High-resolution electrical resistivity and aeromagnetic imaging reveal the causative fault of the 2009 M w 6.0 Karonga, Malawi earthquake. *Geophysical Journal International*, 213(2), 1412-1425, doi:10.1093/gji/ggy066.
7. **Kolawole, F.**, Atekwana, E.A., Malloy, S., Stamps, D.S., Grandin, R., Abdel Salam, M.G., Leseane, K. and Shemang, E.M. (2017). Aeromagnetic, gravity, and Differential Interferometric Synthetic Aperture Radar analyses reveal the causative fault of the 3 April 2017 Mw 6.5 Moyabana, Botswana, earthquake. *Geophysical Research Letters*, 44(17), pp.8837-8846, doi:10.1002/2017GL074-620.
6. **Kolawole, F.**, Atekwana, E.A., and Ismail, A. (2017). Near-surface electrical resistivity investigation of coseismic liquefaction-induced ground deformation associated with the 2016 Mw 5.8 Pawnee, Oklahoma, earthquake. *Seismological Research Letters*, 88(4), 1017-1023, doi:10.1785/0220170004.
5. Anifowose, A.Y.B., and ***Kolawole, F.** (2014). Appraisal of the geotourism potentials of the Idanre Hills, Nigeria. *Geoheritage*, 6(3), 193-203, doi:10.1007/s12371-014-0100-5.
4. Anifowose, A.Y.B., and ***Kolawole, F.** (2012). Emplacement Tectonics of Idanre Batholith, West Africa. *Comunicação Geológicas*, 99(2).
3. Anifowose, A.Y.B., and ***Kolawole, F.** (2012). Tectono-hydrological study of Akure metropolis, Southwestern Nigeria. *Special Publication of the Nigerian Association of Hydrological Sciences*, 106-120.
2. **Kolawole, F.**, and Anifowose, A.Y.B. (2011). Talus caves: Geotourist attractions formed by spheroidal and exfoliation weathering on Akure-Ado Inselbergs, Southwestern Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 4(3), 1-6, doi:10.4314/ejesm.v4i3.1.
1. **Kolawole, F.**, and Anifowose, A.Y.B. (2011). Remote sensing analysis of a dextral discontinuity along Ifewara-Zungeru area, Nigeria, West Africa. *Indian Journal of Science and Technology*, 4(1), 46-51.

Others: Thesis, Conference Extended Abstracts, Data Publications, and Magazine Articles

11. **Kolawole, F.**, & Ajala, R. (2025). Final report for 'Multi-Resolution and -Scale Synthesis of Cascadia Earth Models'. Zenodo. <https://doi.org/10.5281/zenodo.17048720>.
10. **Kolawole, F.**, Kiberu, J. M., & Atekwana, E. (2025). Geological Paleoslip Fault Data for the Albertine Rift, Uganda [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.15079001>
9. **Kolawole, F.**, Nthaba, B., & Kgosidintsi, B. (2025). Data Supporting Incipient Rifting of the Kalahari Craton: Reactivation of Mesozoic Failed Rifts in Southern Africa's Cratonic Interior' [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.14631315>
8. **Kolawole, F.**, & Foster-Baril, Z. (2024). Fracture Data Supporting: 'The 2024 Mw4.8 New Jersey Intraplate Earthquake: Preferential Rupture of an Immature Fault in Frictionally Unstable Basement Rocks' [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.14104727>
7. **Kolawole, F.**, Evenick, J.C. (2024). Data Supporting Global Distribution of Geothermal Gradients in Sedimentary Basins. Zenodo. url: <https://zenodo.org/records/11258453>
6. **Kolawole, F.** (2020). The Roles of Structural Inheritance in Regions of Induced Seismicity and Active Tectonics. *PhD Dissertation, University of Oklahoma*.
5. **Kolawole, F.**, Carpenter, B.M., and Turko Simpson, M. (2019) The Intra-Basement Reflectors in the STACK Area of Oklahoma: What are they really? *AAPG Explorer, April 2019*.
4. Chopra, S., Marfurt, K.J., **Kolawole, F.**, and Carpenter B.M. (2018). Nemaha strike-slip fault expressions on 3D seismic data in the SCOOP trend of Oklahoma. *AAPG Explorer, June 2018*.
3. Atekwana, E.A., **Kolawole, F.**, Ismail, A., and Harding, J.K. (2017). Assessing earthquake rupture zones: An integrated Electrical and Aeromagnetic Approach. In International Conference on Engineering Geophysics, Al Ain, United Arab Emirates, 9-12 October 2017, *Society of Exploration Geophysicists (SEG)*.
2. **Kolawole, F.** (2017). Mw 6.0 Karonga, Malawi Earthquake Occurred on Cenozoic Faults That Reactivated Precambrian Shear Zone: Evidence from Aeromagnetic and Electrical Resistivity Imaging. *MSc Thesis, Oklahoma State University*.
1. **Kolawole, F.** (2008). Brittle Deformation of a Basement Massif in southwest Nigeria, Idanre Batholith. *BSc Thesis, Federal University of Technology, Akure, Nigeria*.

Invited Lectures

----- 2025-----

- 11/07/2025** – Center for Earthquake Research and Information (CERI), Univ. of Memphis
- 10/08/2025** – University of Bristol, UK
- 10/06/2025** – Oxford University, UK
- 10/02/2025** – Imperial College London, UK
- 10/01/2025** – University of Southampton, UK
- 08/06/2025** – Keynote speaker at New York Earth Science Teachers Association (NYEST) Conference
- 04/14/2025** – Panelist for keynote session at 2025 SSA Annual meeting, Baltimore
- 04/17/2025** – 2025 SSA Annual Meeting, Baltimore, session “Earthquakes, Lithospheric Structure, and Dynamics in Stable Continental Region”
- 02/20/2025** – University of Pittsburg, Pennsylvania

---- 2024----

- 09/23/2024** – GSA Annual Conference, Anaheim, CA
- 09/13/2024** – Science Research Fellows Meeting, Columbia University, NY
- 09/10/2024** – Statewide California Earthquake Center (SCEC)
- 08/06/2024** – Gordon Research Conference on Rock Deformation, Maine
- 07/8/2024** – University of Dar es Salaam, Tanzania
- 06/26/2024** – 2024 Structural Geology and Tectonics Forum, Bellingham, Washington
- 05/14/2024** – Botswana International University of Science & Technology, Botswana
- 04/26/2024** – Binghamton University, New York

---- 2023----

- 12/12/2023** - AGU Fall Meeting 2023, San Francisco
- 11/09/2023** - University of Washington, Seattle
- 07/25/2023** - Southern East Africa Rift System Workshop, Blantyre, Malawi
- 04/12/2023** - CU R&D: Research and Diversity at Columbia University
- 03/31/2023** - McGill University, Canada

---- 2022----

- 10/06/2022** - New Mexico Tech.
- 09/29/2022** - Syracuse University
- 09/23/2022** - University of Massachusetts at Amherst
- 08/07/2022** - Gordon Research Seminar (GRS): Invited panelist
- 05/26/2022** - PEMEX Mexico
- 05/11/2022** - AAPG Petroleum Structure and Geomechanics Division
- 04/08/2022** - Geological Survey of Brazil
- 02/25/2022** - Georgia Tech.
- 02/08/2022** - Dallas Geological Society (DGS)

---- 2021----

- 12/13/2021** - AGU Fall Meeting, Session T001 “Advances in our understanding of magma-poor and magma-rich rifting processes”
- 11/19/2021** - Tulane University
- 10/11/2021** - GSA Annual Meeting (Connects 2021)
- 09/16/2021** - University of Alaska Anchorage
- 06/30/2021** - United States Geological Survey, California
- 06/09/2021** - NSF/GeoPRISMS Rift2Ridge Margins Workshop
- 05/11/2021** - Ruhr-Universität Bochum, Germany
- 04/02/2021** - Virginia Tech.
- 03/11/2021** - University of Texas at Austin
- 03/09/2021** - University of St. Andrews, U.K.
- 03/09/2021** - Arizona State University
- 03/03/2021** - University of Oklahoma
- 03/01/2021** - Columbia University
- 02/24/2021** - University of Cambridge, U.K.
- 02/10/2021** - University of California, Davis (UC Davis)
- 01/25/2021** - Utah State University (USU)

----2020----

12/17/2020 - AGU Fall Meeting, PPEM Session MR028

11/02/2020 - Rifted Margin Webinars, GFZ Potsdam

Academic Service and Leadership

NSF Grant Review Panelist

Fall 2024

Journal Editing:

- **Associate Editor** 2021 - Current
Geochemistry, Geophysics, Geosystems (AGU journal)
- **Associate Editor** 2024 - 2025
The Journal of Geology
- **Associate Editor** 2022 - 2024
Frontiers in Earth Science - *Structural Geology & Tectonics*
- **Editorial Board Member** 2020 - 2023
ES³ (The Geological Society of London Journal)

Journal Reviewing:

- Science
- Tectonics
- Earth and Planetary Physics
- EGU Solid Earth
- Journal of African Earth Sciences
- Tectonophysics
- Basin Research
- Italian Journal of Geosciences

Community Leadership Roles via Scientific Meeting Convening:

- *Convener*, AGU 2022 session T010: From Rift to Ridge: The Roles of Faulting, Fluids, Surface Processes, and Tectonic Inheritance
- *Co-Convener*, AGU 2021 session T023: Recent Advances and Future Directions in Studying the Geology and Tectonics of Africa
- *Co-Convener*, AGU 2020 session T028: Recent Advances and Future Directions in Studying the Tectonics and Geodynamics of Africa
- *Co-Convener*, GSA 2020 session T21: The Geology of Induced Seismicity
- *Organizing Committee*, GFZ Rifts and Rifted Margins Seminar 2021 - Present
- *Coordinating committee*, EGU TS-Must Read Papers 2020 - 2020
- *Outdoor Trip Coordinator*, AAPG OSU Student Chapter 2016 – 2017

Scientific Community Memberships

Member, American Geophysical Union (AGU)

Member, Geological Society of America (GSA)